

2. The stent assembly of claim 1 wherein the cylindrical jacket [is formed of heterologous tissue] comprises a type of heterologous tissue selected from the group consisting of pericardium, aortic leaflet, veins, and arteries, the removed outer layer being the same type of tissue as the thinned layer of tissue.

3. The stent of claim [2] 1, wherein the [heterologous] tissue is selected from the group consisting of bovine pericardium, porcine pericardium, and aortic leaflet, veins and arteries.

9. (Amended) The stent assembly of claim 1 wherein the [stent] cylindrical jacket is disposed within the [cylindrical jacket] stent.

10. (Amended) A method for maintaining the patency of a body lumen comprising the steps of:

a) mounting on a delivery catheter a stent assembly comprising a tubular expandable stent with a cylindrical jacket formed of biocompatible, non-thrombogenic expandable material, the cylindrical jacket comprising a thinned layer of tissue having a surface formed from removal of an outer layer of the tissue;

b) advancing the delivery catheter through the body lumen until the stent assembly is positioned at a desired location;

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c) expanding the stent assembly to anchor it within the [bodily] body
lumen; and

d) withdrawing the delivery catheter.

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11. (Amended) A cylindrical jacket formed of heterologous tissue configured
to fit over a portion of an intraluminal stent, the cylindrical jacket comprising a thinned
layer of tissue having a surface formed from removal of an outer layer of the tissue.

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29. (Amended) An expandable jacketed stent comprising a metallic tubular
member configured to expand from a first circumference [configuration] to a second
circumference [configuration], and a jacket formed of [heterologous] tissue [containing a
therapeutic or diagnostic agent and having a thickness of about 0.05 mm to about 0.20
mm] on an outer surface of the stent in a wrapped configuration configured to unwrap as
the stent expands.

30. (Amended) The jacketed stent of claim 29 wherein the jacket [is on an
outer surface of the stent in a folded configuration configured to unfold as the stent
expands to the second circumference configuration] has a circumference on the
unexpanded stent larger than the first circumference of the stent, and a circumference on
the expanded stent about equal to the second circumference of the stent.

32. (Amended) A method of treating a patient, comprising:

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- a) providing an elongated delivery catheter having an expandable member on a distal extremity thereof;
- b) mounting onto the expandable member on the distal extremity of the delivery catheter an expandable stent having first circumference and a second expanded circumference and having a cylindrical jacket formed of biocompatible, non-thrombogenic expandable material on an outer surface of the stent in a wrapped configuration configured to unwrap as the stent expands to the second circumference configuration], the jacket having a width about equal to the second expanded circumference of the stent];
- c) advancing at least the distal extremity of the catheter within a body lumen of the patient until the jacketed stent is disposed at a desired location within the body lumen;
- d) expanding the expandable member on the distal extremity of the catheter to expand the jacketed stent mounted thereon and unwrap the jacket as the stent expands, and fix the expanded jacketed stent within the body lumen; and
- e) contracting the expanded expandable member so the elongated delivery catheter can be removed from the patient.

Please add new claims 35-44, as follows.

35. The stent assembly of claim 1, wherein the cylindrical jacket has a length less than a length of the stent.

36. The stent assembly of claim 1, wherein the cylindrical jacket has a length greater than a length of the stent, the length of the cylindrical jacket being not more than 5% greater than the length of the stent.

37. The stent assembly of claim 1, wherein the stent is expandable from an unexpanded configuration to an expanded configuration, and wherein the cylindrical jacket has a circumference on the unexpanded stent larger than a circumference of the stent in the unexpanded configuration, and a circumference on the expanded stent about equal to a circumference of the stent in the expanded configuration.

38. The jacketed stent of claim 29 wherein the jacket in the wrapped configuration on the unexpanded stent is wrapped about the stent and at least a section of itself so that multiple layers of jacket are present on at least part of the unexpanded stent.

39. The jacketed stent of claim 38 wherein the jacket is a ribbon spirally wrapped about the unexpanded stent with adjacent turns of the ribbon overlapping.

40. The jacketed stent of claim 38 wherein the jacket has a first edge and a second edge extending the length of the jacket, the first edge overlapping the second edge to form the wrapped configuration the first edge being free to unwrap around the stent upon expansion of the stent.

41. The jacketed stent of claim 38 including at least one securing member releasably fixing the jacket in the wrapped configuration prior to expansion of the stent.